

CHEVERIKOV, N.M., kand.tekhn.nauk; NIKOLAYEVSKAYA, Ye.Ye., inzh.

Controlling the quality of printing paper. Bum.prom. 34 no.10:
7-9 0 '59. (MIRA 13:2)

1. Moskovskiy filial TSentral'nogo nauchno-issledovatel'skogo
instituta tsellyuloznoy i bumazhnoy promyshlennosti.
(Paper)

CHETVERIKOV, Nikolay Sergeyevich; SHENTSI, Ye.M., red.; PYATAKOVA,
N.D., tekhn. red.

[Statistical and stochastic studies] Statisticheskie i stokhasticheskie issledovaniia. Moskva, Gosstatizdat, 1963.
299 p. (MIRA 16:11)

(Mathematical statistics)

CHETVERIKOV, B.

Vasilii Konstantinovich Khoroshko. Vopr. neirokhir. 14 no.
4:62-63 July-Aug. 1950. (CJML 20:1)

1. Obituary.

CHETVERIKOV, N.S., professor; KANAVETS, L.N., kandidat meditsinskikh nauk

Neuroses and their therapy in sanatoria and health resorts. Sov.
med. 18 no.11:5-10 N '54. (MIRA 7:12)

1. Iz TSentral'nogo instituta kurortologii Ministerstva zdavo-
okhraneniya SSSR.

(NEUROSES, therapy
sanatoria & health resorts)

(HEALTH RESORTS
ther. value in neuroses)

(SANATORIA
neuroses ther.)

CHETVERIKOV, N.S.

[Sanatorium and health resort treatment of disorders of the nervous system] Sanatorno-kurortnoe lechenie nervnabol'nykh. Moskva, Medgiz, 1956. 113 p.

(MIRA 11:4)

(NERVOUS SYSTEM--DISEASES)

CHETVERIKOV, N.S.

[Problems of balneotherapy in infections and injuries of the nervous system] Voprosy balneoterapii infektsionnykh i travmaticheskikh zabolevanii nervnoi sistemy. Moskva, Medgiz, 1956. 262 p. (MLRA 10:1)
(HYDROTHERAPY) (NERVOUS SYSTEM--DISEASES)

CHETVERIKOV, N.S.; STRELKOVA, M.I.

Cardiac pains in connection with some diseases of the nervous system
and their treatment by baths. Vop.kur.fizioter. i lech. fiz.kul't. 21
no.3:38-47 J1-S '56. (MIRA 9:10)

1. Iz nevrologicheskogo otdeleniya (zav. - prof. N.S.Chetverikov)
TSentral'nogo instituta kurortologii (dir. kandidat meditsinskikh
nauk G.N.Pospelova)

(HEART--DISEASES)

(NERVOUS SYSTEM--DISEASES)

(BATHS)

Country	: USSR
Category	: Human and Animal Physiology. T
	Effects of Physical Factors. Ionizing Radiation.
Abs. Jour.	: Ref Zhur-Biol., No 23, 1958, 106874
Author	: Ardashnikov, S. N.; <u>Chetverikov, N. S.</u>
Institut.	: -
Title	: The Theory of Integral Dosages.
Orig Pub.	: Tr. Vses. konferentsii po med. radiol. Vopr. gigiyeny i dozimetrii. M., Medgiz, 1957, 145-152
Abstract	: No abstract.

On the Problem of the Definition of Roentgen in the
Recommendation of the International Commission for
Radiological Units (1953) ^{89-9-7/32}

that must be used for corpuscular emission, or the
energy that is absorbed in the course of ionization
and excitation?

- 3.) Is the absolute amount measured or is it referred to
the mass, the volume, or the surface?
- 4.) If reference is made to mass of a volume, then what
mass and what volume: the irradiated volume in which
the corpuscular emission is caused, or the ionized
volume in which ionization or excitation took place?
(With 1 Table) 12 Slavic references)

ASSOCIATION: not given.
PRESENTED BY: -
SUBMITTED: 23.VIII. 1956
AVAILABLE: Library of Congress.

CARD 2/2

CHETVERIKOV, N. S.

ARDASHNIKOV, S.N.; CHETVERIKOV, N.S.

Errors made during the development of the fundamental principles of
the theory of the integral dose [with summary in English]. Vest. rent.
1 rad. 32 no.2:51-55 Mr-Apr '57. (MLRA 10:8)

(RADIATIONS,

dosage, errors permissible in solving principal bases of
theory of integral dose (Rus))

ARDASHNIKOV, S.N., CHETVERIKOV, N.S.

Dosimetry of ionizing radiations for a limited range of particles
[with summary in English]. Biofizika 3 no.4:494-515 '58 (MIRA 11:8)

1. TSentral'nyy institut kurortologii Minzdrava RSFSR, Moskva.
(RADIATION--DOSAGE)

CHETVERIKOV, N.S. (Moskva)

Physical and balneotherapy for diseases of the vegetative nervous system. Vop.kur.fizioter. i lech.fiz.kul't 23 no.4:289-293
Jl-Ag '58 (MIRA 11:8)

1. Zaveduyushchiy neurologicheskim otdeleniyem Tsentral'nogo instituta kurortologii.
(NERVOUS SYSTEM, AUTONOMIC--DISEASES)
(PHYSICAL THERAPY)

ARDASHNIKOV, S.N.; CHETVERIKOV, N.S.

Basic dosimetric units in the recommendations of the International
Comission on Radiological Units and Measurements in 1956. Med.rad.

4 no.1:73-77 Ja '59.

(MIRA 12:2)

(RADIOLOGY,

Internat. Commission on Radiol. Units &
Measurements (Rus)

BORISOV, A.D.; CHETVERIKOV, N.S.

Most important health resorts of the Rumanian People's Republic;
personal impressions. Vop. kur., fizioter. i lech. fiz. kul't.
24 no. 4:361-365 J1-Ag '69. (MIRA 14:2)
(RUMANIA—HEALTH RESORTS, WATERING PLACES, ETC.)

CHUPROV, Aleksandr Aleksandrovich; CHETVERIKOV, N.S., red.; MAYSKAYA,
N.I., red.; PYATAKOVA, N.D., tekhn.red.

[Main problems of the correlation theory; on the statistical
study of the relation between phenomena (1926)] Osnovnye
problemy teorii korrelyatsii; o statisticheskom issledovanii
svyazi mezhdu iavleniyami, 1926. Moskva, Gosstatizdat TsSU
SSSR, 1960. 170 p. (MIRA 13:7)
(Correlation (Statistics))

ARDASHNIKOV, S.N.; CHETVERIKOV, N.S.

Roentgen and rad and how they are used. Radiobiologiya 2 no.2:322-
331 '62 (MIRA 15:4)

1. Tsentral'nyy nauchno-issledovatel'skiy institut kurortologii i
fizioterapii, Moskva.
(RADIATION--DOSAGE)

ADRASHNIKOV, S.N.; CHETVERIKOV, N.S.

Apropos of the article of D.K. Zavadovskii, "Some problems in dosimetry of betatron radiation," printed in "Meditsinskaia radiologiya" No.5, 1961. Med.rad. 7 no.7:77-78 J1 '62.

(MIRA 15:11)

(RADIATION--DOSAGE) (ZAVADOVSKII, D.K.)

AKULOVA, R.F.; BYKHOVSKIY, Z.Ye.[deceased]; VYGODNER, Ye.B.;
COL'DFAYL', L.G.; DIK, V.G.; DMITRIYEVA, N.M.; DUBYNINA,
Ye.I.; LEVIN, B.S.; NEZLIN, S.Ye.; SPERANSKIY, N.I.;
SOROKINA, Ye.I.; TKACHENKO, A.F.; FREYDIN, Kh.M.;
CHETVERIKOV, N.S.; VUL'FSON, I.Z., red.; KOKIN, N.M., tekhn.
red.; PRONINA, N.D., tekhn. red.

[Manual for physicians on the selection of sanatoriums and
health resorts] Rukovodstvo dlia vrachei po sanatorno-
kurortnomu otboru. Pri uchastii R.F.Akulovoi i dr. 2 izd.,
dop. i ispr. Moskva, Medgiz, 1963. 511 p.

(SANATORIUMS)

(MIRA 16:12)

(HEALTH RESORTS, WATERING PLACES, ETC.)

CHETVERIKOV, P.

CHETVERIKOV, P.

Take note of local experience and suggestions. Fin.SSSR 18
no.2:48 F '57.

(MLRA 10:5)

1.Nachal'nik Glavnogo upravleniya gosudarstvennogo strakhovaniya f^{so}
(Insurance, Social)

CHETVERIKOV, P.

CHETVERIKOV, P.

Improve and develop government insurance. Fin. SSSR 18 no.5:59-66
My '57. (MIRA 10:6)

1. Nachal'nik Glavnogo upravleniya gosudarstvennogo strakhovaniya.

(Insurance)

CHETVERIKOV, P.

For further growth of savings. Fin. SSSR 22 no.8:8-16 Ag '61.
(MIRA 14:8)

1. Chlen kollegii Ministerstva finansov SSSR.
(Savings banks)

CHETVERIKOV, P.

For developing savings bank work further. Den. 1 kred. 21
no.3:3-11 Mr '63. (MIRA 16:3)

(Savings banks)

CH
CHETVERIKOV, S.D.

Celadonite from Khibel, Crimea. S. D. Chetverikov and A. F. Pioletova. *Compt. rend. acad. sci. U. R. S. S.* 2, 200-71 (in German 271-2) (1935).—A description of a gray-green specimen of celadonite found in calcite. An analysis is given, together with the analyses of two

of Na_2FeO_3 than in presence of Na_3PO_4 and is best with Na_2SO_4 .
A. A. Bochtlingk

PROCESSING AND PROPERTIES UNIT

Ca
CHETVERIKOV, S.-D.

A monobasic from Takob (Tadjik Soviet Socialist Republic). S. D. Chetverikov, *Compt. rend. acad. sci. U. R. S. S. 26, 87-91 (1963) (in English)*.—A dike of black lamprophyric rock occurs in a biotite granite on the left bank of the Varsob-balo River at the confluence of the Diamalik and Takob rivers. Macroscopically it is a greenish black mass contg. fine needlelike crystals of amphibole and pyroxene. Chem. analysis gave: SiO₂ 41.81, TiO₂ 1.83, Al₂O₃ 14.55, Fe₂O₃ 3.24, Cr₂O₃ 0.06, FeO 7.42, MnO 0.25, MgO 7.36, CaO 13.76, Na₂O 2.63, K₂O 1.02, P₂O₅ 0.38, V₂O₅ 0.03, loss on ignition 3.84 and H₂O 0.42. Microscopic studies show that the rock has a porphyritic structure with a vitrified ground mass. Selective calcn. from 3 thin sections gave the following results: augite 28.8, barkevikite 23.7, chlorite 3.2, zeolite + calcite 1.7, ore 0.1 and glass 42.5% by vol. V. S. de Marchi

ASB-51A METALLURGICAL LITERATURE CLASSIFICATION

FROM SYMBOLISM										FROM NOMEN									
SYMBOLS										NOMEN									
SYMBOLS										NOMEN									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

CHETVERIKOV, S.D.

CA

Relation between the optical properties of silicates and their structure and composition. S. D. Chetverikov. *Vestnik Moscow Univ.* 1969, No. 6, 67-67; cf. *Isotopes*, C.A. 34, 1961. Double methods in trigonal or tetrahedral projections are used for the study of the relation between the n and the crystal structure of silicate minerals. There are, however, no direct general relations between the chem. compn. and the n , or mol. refractions (calcd. from the Lorentz-Lorentz formula), and only approximating methods can be used. The vol. V_0 of one O ion in the elementary cell is empirically related to the av. n of crystal phases having a similar chem. compn. In addn. there is a particular effect of the position of the Al ions in the structure in so far as the octahedral coordination of Al increases n . In comparison with the effect of the V_0 value, the O that is combined in the mol. groups of the "zeolitic water" may be neglected. In silicate structures of similar types (e.g. in Na-Al-Si and Ca-Al-Si minerals) the presence of metal ions is particularly important for the optical properties. The n is greatly decreased by the zeolitic water, whereas other kinds of water do not show an essential effect. W. Nickel

CHETVRIKOV, S. D.

32376 CHETVRIKOV, S. D. Rastvorimyy Kremnezem V Nekotorykh Magmaticheskikh i
Osadochnykh Porodakh. Uchen. Zapiski (Mosk. Gos. Un-t. im. Lomonosova),
vyp 142, 1949, s. 113-24

SO: Letopis' Zhurnal'nykh Statey, Vol. 44

1. CHETVERIKOV, S. D.
2. USSR (600)
4. Geology and Geography
7. Short Course in General Petrography, V. V. Zubkov. Academician D. S. Belyankin, editor. (Coal Technical Press, 1950). Reviewed by S. D. Chetverikov, Sov. Kniga, No. 7, 1951.
9. [REDACTED] Report U-3081, 16 Jan. 1953, Unclassified.

CHETVERIKOV, S. D.

"Methods of Crystallo-Optical Examination of Polished Sections, Iz. AN SSSR,
Ser. Geol., Reviewed by I. I. Tanatar, No. 2, pp 152-153, 1952

CHETVERIKOV, S. D.

"Reply to I. I. Tanatar's Review on 'Methods of Crystallo-Optical Examination of Polished Sections,' Iz. AN SSSR, Ser. Geol., No.6, pp 977-979, 1952

CHETVERIKOV, S.D.

KRITSKIY, Vladimir Viktorovich, dotsent; ~~CHETVERIKOV, S.D., dotsent.~~

[Short course in mineralogy and petrography with basic principles of crystallography] Kratkii kurs mineralogii i petrografii s nachal'nymi svedeniami po kristallografii. Utverzhdeno v kachestve ucheb. posobiia dlia uchashchikhsia gornyykh tekhnikumov. Izd. 6., perer. i dop. (MLRA 7:5)
Moskva, Ugletekhizdat, 1953. 275 p.

1. Moskovskiy gosudarstvennyy universitet (for Chetverikov).
(Mineralogy) (Petrology) (Crystallography)

TOROPOV, Nikita Aleksandrovich, 1908-

BULAK, L.N.; CHETVERIKOV, S.D., redaktor.

[Course in mineralogy and petrography and the principles of geology]
Kurs mineralogii i petrografii s osnovami geologii. Pod red. S.D. Chet-
verikova. Moskva, Gos. izd-vo lit-ry po stroit. materialam, 1953. 486 p.
(MLRA 7:1)

(Mineralogy) (Petrology) (Geology, Stratigraphic)

1. CHETVERIKOV, S.D.
2. USSR (600)
4. Chemistry, Analytical
7. Use of optical properties of crystals in analytical chemistry, and YE.YE. Jelly's article in "Microscopy" in "Physical methods of organic chemistry" edited by A. Weyssberger, v.2, Izd. in.lit., 1952".
Reviewed by S.D. Chetverikov. Usp.khim 22 no. 5, 1953.

9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953, Uncl.

SOBOL'EV, V.S.; CHETVERIKOV, S.D., redaktor; SEMENOVA, M.V., redaktor;
MALEK, Z.B., tekhnicheskii redaktor; POPOV, N.D., tekhnicheskii
redaktor.

[The Fedorov method] Fedorovskii metod. Moskva, Gos. nauchno-
tekhn. izd-vo lit-ry po geologii i okhrane neдр, 1954. 262 p.
(MIRA 7:11)

(Polarizing microscope) (Crystallography)

... Степанов, Сергей Д. : Изучение к петроп. анализ
... Степанов, Сергей Д. : Изучение к петроп. анализ

... with Khurcheski to v. (Coudé to the
... of Chemical Analysis of
... of their Chemical Paper
... to the Khurcheski to the (Coudé to the)

On 11:11

CHETVERIKOV, S.D.

USSR/Inorganic Chemistry - Complex Compounds, C

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 651

Author: Chetverikov, S. D.

Institution: None

Title: On Errors in the Interpretation of the Composition and Structure of the Silicates and in the Writing of Their Formulas

Original

Periodical: Zap. Vses. mineralog. o-va, 1956, Vol 85, No 1, 118-119

Abstract: The author emphasizes the need for taking into account contemporary information on the crystalline structure of the silicates in writing their formula and criticizes from this point of view a number of courses, manuals, and handbooks.

Card 1/1

CHETVERIKOV, S.D.

NAKOVNIK, Nikolay Ivanovich; ~~CHETVERIKOV, S.D.~~ redaktor; NEMANOVA, G.F.,
redaktor izdatel'stva; KRYNOCHKINA, K.V., tekhnicheskiy redaktor

[Immersion method as applied to a petrographic microscope]
Immersionnyi metod v primeneni k petrograficheskim shlifam. Izd.
3-e. Moskva, Gos.nauchno-tekhn.isd-vo lit-ry po geol. i okhrane
nedr, 1957. 40 p. (MLRA 10:8)
(Petrographic microscope)

~~CHETVERIKOV, S.D.~~

Graphic representation of the composition of natural waters. Vest.
Mosk. un. Ser. biol., pochv., geol., geog. 12 no. 4:133-145 '57.
(MIRA 11:5)

1. Kafedra petrografii Moskovskogo gosudarstvennogo universiteta.
(Water--Analysis)

MOZGOVA, N.N.; CHETVERIKOV, S.D.

Dannemorite from the Tetyukhe deposit. Trudy Min.muz. no.10:154-163
'59. (MIRA 16:8)

(Tetyukhe Valley—Dannemorite)

CHETVERIKOV, S.D.; BATANOVA, A.M.

Possibilities for industrial use of metamorphic rocks of the
southern Baikal region. Vest.Mosk.un.Ser.4: Geol. 15 no.3:
58-70 My-Je '60. (MIEA 13:8)

1. Kafedra petrografii Moskovskogo universiteta.
(Baikal region--Rocks, Crystalline and metamorphic)

CHETVERIKOV, S.D.

Effective methods of representing the composition of natural waters
in connection with oil field waters and their standard classification.
Izv.vys.ucheb.zav.; geol. i razv. 4 no.12:85-94 D '61. (MIRA 15:2)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
(Oil field brines)

CHETVERIKOV, S.D.

Additional formulas introduced into E.A.Kuznetsov's method for the conversion of the composition of igneous rocks. Vest.Mosk.un.Ser.4: Geol. 17 no.1:36-39 Ja-F '62. (MIRA 15:2)

1. Kafedra petrografii Moskovskogo universiteta.
(Rocks, Igneous--Analysis)

KUZNETSOV, Yefrem Aleksandrovich; CHETVERIKOV, S.D., red.

[Method of the comparative dispersion of double refraction;
new method for the analysis of the chemical composition of
crystal substances and the determination of the absolute
age of rocks] Metod sravnitel'noi dispersii dvuprelomleniia;
novyi metod analiza khimicheskogo sostava kristallicheskikh
veshchestv i opredeleniia absoliutnogo vozrasta gornykh po-
rod. Izd.2., dop. Moskva, Izd-vo "Nedra," 1964. 179 p.
(MIRA 17:10)

RASHIN, G.A., student; CHETVERIKOV, S.D.

Petrochemical method for evaluating raw material for stone casting. Izv. vys. ucheb. zav.; geol. i razv. 7 no.9:71-80
S '64. (MIRA 17:10)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

CHETVERIKOV, S.D.; SYUN DA-KHE [Hsiung Ta-ho]; BATANOVA, A.M.

Some characteristics of the crystallization of haplobasaltic melts,
Vest.Mosk.un. Ser.4: Geol. 20 no.2:21-29 Mr-Apr '65.

(MIRA 18:5)

1. Kafedra petrografii Moskovskogo universiteta.

OMAR, A.A.; CHETVERIKOV, S.D.

Artificial galaxite. Vest.Mosk.un.Ser.4:Geol. 20 no.5:77-80
S-O '65. (MIRA 18:11)

1. Kafedra petrografii Moskovskogo gosudarstvennogo universiteta.

CHETVERIKOV, S.P.

Making use of spring floods of rivers in vertical control
surveys. Geod. i kart. no.9:54-57 S '61. (MIRA 14:9)
(Surveying) (Floods)

CHEVVERIKOV, PROF. S. S.

"On The Interaction Of The Automatic Genetic Processes With Natural Selection. Chair Of Genetics (Chief: Prof. S. S. Chevverikov), Gorki State University." (p. 1139) by Nikoro, Z. S. And Rogozyanova, A. I.

SO: PREDECESSOR OF JOURNAL OF GENERAL BIOTOGY, (Biologicheskii Zhurnal) Vol. VII 1938, Nos. 5-6

CHETVERIKOV, Sergey Sergeevich, doktor tekhn. nauk, prof.;
YESHCHENKO, N.N., red.

[Metal-cutting tools; their design and manufacture]
Metallorezhushchie instrumenty; proektirovanie i pro-
izvodstvo. Moskva, Vysshaya shkola, 1965. 730 p.
(MIRA 18:10)

CHETVERIKOV, S.S.

USSR/General and Specialized Zoology - Insects.

P.

Abs Jour : Ref Zhur - Biol., No 8, 1958, 35174

Author : Chetverikov, S.S.

Inst : -

Title : A New Species of the Genus *Cucullia* Schrk. (Lepidoptera, Noctuidae) from the South Ural Region.

Orig Pub : Entomol. obozreniye, 1956, 35, No 4, 927-928.

Abstract : A new species *Cucullia tiefi* sp. n. was described, according to the male discovered by Tief in Orenburg in May 1913.

Card 1/1

- 2 -

CHETVERIKOV4S8S84PROF8

600

1. CHETVERIKOV, S. S., Professor

2. USSR (600)

Automechanical Institute "Levin, B. G. A Hard Alloy Tipped Drill",
Stank i Instrument, 12, No. 1, 1941.

9. ~~████~~ Report U-1503, 4 Oct. 1951.

CHETVERIKOV, SERGEI SERGEEVICH .

Metallorezhushchie instrumenty. Izd.3., perer. i dopoln. Dop. v kachestve uchebnika dlia tekhnologich. spetsial'nostei vyuzov i tekhnikumov. Moskva, Gostekhizdat, 1945. 627 p. illus.

Metal-cutting tools.

DLC: TJ1230.C48 1945

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

CHETVERIKOV, S. S. and S. S. NEKRASOV.

Tochnaia otlivka rezhushchikh instrumentov metodom voskovykh modelei.
(Vestn. Mash., 1950, no. 11, p. 40-43)

Precision casting of cutting tools by wax model method.

DLC: TN4.V4

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

CHETVERIKOV, S.S.

PHASE I TREASURE ISLAND BIBLIOGRAPHICAL REPORT AID 331 -- I

BOOK

Call No.: AF621822

Author: CHETVERIKOV, S. S., Prof. Doct. of Tech. Sci., 4th edition,
revised and supplemented

Full Title: METAL CUTTING TOOLS

Transliterated Title: Metallorezhushchiye instrumenty

Publishing Data

Originating Agency: None

Publishing House: State Scientific and Technical Publishing House of
Machine-Building and Ship-Building Literature
(Mashgiz)

Date: 1953 No. pp.: 575

No. of copies: 15,000

Editorial Staff

Editor: Tishin, S. D., Kand. of
Tech. Sci.

Tech. Ed.: None

Editor-in-Chief: Beyzel'man, R. D.,
Engineer

Appraisers: Alekseyev, G. A.,
Engineer, Laureate Stalin
prize; the Chairs of "Metal-
lography and Heat Treat-
ment"; "Cutting, Instru-
ments and Lathes", "Tech-
nology of Machine Building
of the Moscow Mechanical
Institute".

1/8

Metallorzhushchiye instrumenty

AID 331 - I

PAGE
35-44

Ch. II Tool Casting

General information; casting into green soil forms, or into forms constructed of bars; casting by melting out models; chill casting under pressure; and centrifugal chill casting.

Ch. III Economy in Quality Materials for Tools

General information; welding of tools; welding-on of tools; weld-seaming of tools; comparison of gas and electric arc welding.

Ch. IV Equipment for Heat Treatment of Tools

General information; petrol and gas furnaces; electric furnaces; surface heating in high frequency electromagnetic field; machine and tube generators; methods of heating by high frequency currents in case-hardening.

Ch. V Heat Treatment of Tools

Tool hardening; tempering of tools; tool treatment at below zero temperatures; typical technological process of heat treatment of a tool; annealing of tools; anticorrosion treatment of tools.

45-77

78-93

94-109

3/8

Metallorzhushchiye instrumenty

AID 331 - I

PAGE

- | | | |
|-------------|--|---------|
| Ch. VI | Methods of Improving the Working Parts of Tools | 110-134 |
| | General information; cyanidation of tools; electrical spark strengthening; cold hardening; electrolytic chroming. | |
| Ch. VII | Cutting Edges of Finishing Tools | 135-162 |
| | General information; abrasive grinding; abrasive finishing; chemical and mechanical grinding; electrochemical finishing (Electrical polishing); electrical spark grinding and finishing; anodic mechanical grinding and finishing; electrical contact grinding. | |
| SECOND PART | | |
| Ch. VIII | Cutters | 163-221 |
| | Basic information; lathe cutters; form cutters; planing and grooving cutters; special features in designing combined cutters; cutters fitted-out with hard alloys; mineral-ceramic cutters; shaving-breakers; methods of preparation of cutters; quality of cutters. | |
| Ch. IX | Saws | 222-236 |
| | Saw design; circular saws; straight saws; | |

4/8

Metallorzhushchiye instrumenty

AID 331 - I

PAGE

material for saws; methods of saw production;
quality of saws.

Ch. X Pull and Push Broaches

237-265

Basic conceptions; design of pull broaches; pull
broaches for internal use; helical broaches; pull
broaches for external broaching; coal cutting
and scouring pull broaches; design of push broaches;
manufacture of push and pull broaches; qualities
of broaches.

Ch XI Files

266-285

File design; methods of file manufacture;
quality of files.

Ch. XII Tools for Drilling Perforations

286-344

Types of tools; drills; basic conceptions;
cutting edge of helical drills; methods of
manufacture of drills; quality of drills; adapter
for drills for thin metal sheet drilling; counter-
bores; basic conceptions; design of counterbores;
methods of manufacture of counterbores; quality
of counterbores; reamers; basic conceptions; design
of reamers; shaping the cutting edges of reamers;
methods of manufacture of reamers; quality of reamers.

5/8

Metallorzhushchiye instrumenty

AID 331 - I

PAGE

Ch. XIII Milling Cutters

345-403

Basic conceptions; plain-milling cutters; formed-milling cutters; shaping the geometrical dimensions of cutting edges and the calculation of mills with sharp teeth; shaping the geometrical dimensions of cutting edges and the calculation of mills with chisel-shaped teeth; methods of manufacture of mills; quality of mills.

Ch. XIV Gear Cutting Tools (Gear Cutters)

404-480

Basic conceptions; cycloidal and evolvent gearing; design of gear-cutters; involute gear cutters; end-mill gear cutters; gear shaper adapter; worm-gear cutters; worm-gear cutters for spur gears; worm-gear cutters for worm gears; worm-gear cutters for conical wheels with helical teeth; worm-gear cutters for various profiles; gear shaper cutters; shaper cutters for cutting spur gears with straight teeth; shaper cutters for cutting spur gears with oblique teeth; combined shaper cutters; gear cutting hobs; gear cutting tools and adapters; methods of manufacture of gear cutting tools; quality of gear

6/8

Metallorzhushchiye instrumenty

AID 331 - I
PAGE

	cutting tools; tool for shaving gear teeth.	
Ch. XV	Tool for Forming Threads	481-536
	Thread cutting tool; tabs; shaping cutting edges of tabs; methods of manufacture of tabs; qualities of tabs; dies; shaping cutting edges of dies; methods of manufacture of dies; quality of dies; thread-cutting adapters; design of thread-cutting adapters with radial annual cutting dies; threading cutters; quality of threading cutters; thread rolling tool; plane rolling dies; thread rolling rollers.	
Ch. XVI	Composite Tools	537-544
Ch. XVII	Abrasive Tools	545-562
	General information; abrasive tools material; hardness of wheels; methods of abrasive wheel manufacture; grinding wheel dressing.	
Ch. XVIII	Reconditioning of Cutting Tools	563-569
	Bibliography	570-571
	Table of Contents	572-575
Purpose:	This is a textbook approved by the Main Board of Higher Education of the Ministry of Culture of the USSR as a text-	

Metallorzhushchiye instrumenty

AID 331 - I

book for technological specialization in institutions of
higher learning and for students of machine-building
institutions.

Facilities: A number of research institutions and laboratories are
mentioned in the text.

No. of Russian and Slavic References: 50 dated after 1946

Available: A.I.D., Library of Congress.

8/8

CHETVERIKOV, S.S.; GRIBOVSKIY, P.O. ; MISHKIND, S.I.

Ceramic wood cutting-tool tips. Der.prom.4 no.3:14-15 Mr '59.
(MLRA 8:4)

1. Moskovskiy avtomekhanicheskiy institut.
(Cutting tools)

CHETVERIKOV, S.S.
CHETVERIKOV, S.S., doktor tekhn.nauk, prof.; ZIROGOV, N.N., inzh.

Cooling cutting tools by liquid jets. Vest.mash. 37 no.12:71-75
D '57. (MIRA 10:12)

(Metal cutting)
(Metalworking lubricants)

PHASE I BOOK EXPLOITATION 915

Chetverikov, Sergey Sergeyevich

Keramika v mashinostroyeni (Ceramics in Machine Building) Moscow, Izd-vo "Znaniye", 1958. 30 p. (Series: vsesoyuznoye obshchestvo po rasprostraneniyu politicheskikh i nauchnykh znaniy. Seriya IV, 1958, no. 17) 49,000 copies printed.

Sponsoring Agency: Vsesoyuznoye obshchestvo po rasprostraneniyu politicheskikh i nauchnykh znaniy.

Ed.: Islankina, T.F.; Tech. Ed.: Trofimov, A.V.

PURPOSE: This booklet is intended for engineers working in the field of machine building.

COVERAGE: Chemical composition, and various properties of certain ceramics and their application in machine building and in manufacture of various cutting tools and dies are presented in this booklet. No personalities are mentioned. There are 14 Soviet references.

Card 1/2

SOV/123-60-1-547

Translation from: Referativnyy zhurnal. Mashinostroyeniye, 1960, No 1,
p 67 (USSR)

AUTHORS: Chetverikov, S.S., Mishkind, S.I.

TITLE: New Achievements in the Application of Mineral Ceramics in
Tool Manufacture

PERIODICAL: V sb.: Rezaniye mineralkeram. instrumentami. Moscow, Oborongiz,
1958, pp 7 - 19

ABSTRACT: The authors analyze investigation work concerning the improve-
ment of mineral ceramic materials (MM) and their application in
various fields of machine construction. An account is given of
the work of the Moscow Automechanical Institute, checking the
efficiency of MM tools under manufacturing conditions. Plug
gages, draw plates for the drawing of copper wire and wood
cutting tools were investigated. Gages were tested, using rings
of various MM and of U10 grade steel. In every case the MM gages
showed a greater resistance to wear. The investigation of MM
draw plates showed that the use of fine-grained and wear-resisting

Card 1/2

✓

CHETVERIKOV, S.S.

122-2-12/33

AUTHORS: Chetverikov, S.S., Doctor of Technical Sciences, Professor,
and Foteyev, N.K., Engineer.

TITLE: Problems in the Design of Carbide-faced Blanking Press
Tools (Voprosy konstruirovaniya tverdosplavnykh vyrubnykh
shtampov)

PERIODICAL: Vestnik Mashinostroyeniya, 1958, No.2, pp.40-42 (USSR).

ABSTRACT: Blanking press tools with carbide edges have a substantially longer life than those made of carbon tool steels. The whole press tool must, however, be designed for a longer life. In any but small sizes, built-up punches are used. Several methods of attachment are considered. Tests have shown furnace brazing by electrolytic copper in a hydrogen atmosphere and with borax flux to be the best method. Hot and cold shrink fits have been used successfully on cylindrical shanks. Mechanical clamping is preferred, several variants of which are illustrated. The casting-in with fusible alloy gives the best results, but requires more labour. The guidance of the punch against the die is especially important (owing to cutting edge brittleness) to achieve a long life of the tool. Various guiding column designs are illustrated, including carbide guiding rings, ball guide bushes and square section columns with needle-carrying square guide rings. There are 2 figures and 2 Russian references.

Card1/1

AVAILABLE: Library of Congress

CHETVERIKOV, SS
ZOLOTYKH, B.N.; KASPRZHAK, G.M.; KONDRATENKO, V.N.; KRUGLOV, A.I.; RABINOVICH,
I.Ya.; SLEPUSHKIN, Ye.I.; CHETVERIKOV, S.S.

"Using electric erosion method in machining metals" by A.L. Livshchits.
Reviewed by B.N. Zolotikh and others. Izv. AN SSSR, Otd. tekhn. nauk no.2:163-165 P '58. (MIRA 11:3)
(Metal cutting, Electric)
(Livshchits, A.L.)

SOV/122-58-8-12/29

AUTHORS: Chetverikov, S.S., Doctor of Technical Sciences,
Professor, and Foteyev, N.K., Engineer

TITLE: Tests with Blanking Press Tools, Reinforced with Carbide
Edges (Ispytaniye vyrubnykh shtampov, armiroyannykh
tverdymi splavami)

PERIODICAL: Vestnik mashinostroyeniya, 1958, Nr 8, pp 38-40 (USSR)

ABSTRACT: Tests with blanking and piercing press tools are reported wherein the dies and punches had carbide-reinforced edges and the material worked was 0.5 mm thick transformer steel with 0.1% C, 0.2% Si, 0.1-0.2% Mn (not more than 0.025% P or 0.035% S). The ultimate tensile strength was 60-62 kg/mm², the number of folds to failure was 4. The material was hot-rolled with traces of scale. Piercing dies were also tested on 0.20% carbon steel of 3 mm thickness. Tungsten carbide-cobalt plates were used for reinforcing the edges. The carbide materials tested are divided into 4 groups (1, 2, 2a and 3), each distinguished by the mean grain size, namely, 2.6, 1.7, 1.5 and 1 μ . In each group, compositions between a minimum and maximum cobalt content were tested. Groups 1 and 2

Card1/3

Tests with Blanking Press Tools, Reinforced with Carbide Edges SOV/122-58-8-12/29

had a minimum of 8% and maxima of 20 and 25%, respectively. Group 2a ranged from 12% to 20% and group 3 from 20 to 30%. All materials were made by the hydrogen-reduction process for tungsten, except group 2a, where the carbon-reduction process was used. In the tests, carried out in eccentric presses with 150 and 200 strokes per minute, the criterion of blunting of the cutting edges was an excessive flash on the blanked material. The upper cutting edge was made square, the lower edge had a front clearance angle of 30 minutes. A clearance of 8% of the stock thickness was provided. The results of the tests are plotted in Figure 2, showing the life of the cutting edge in millions of cuts against the cobalt content. Each group of carbides reaches roughly the same maximum of 5 1/2 million strokes but the maximum occurs at 8% cobalt in group 1, 12% in group 2 and 15% in group 2a. The magnitude of the cutting edge wear in mm against the number of cuts is plotted in Figure 3, illustrating a typical critical number of cuts beyond which the wear rises rapidly. The predominant nature of wear is the pitting of the edge, whilst the progress of abrasion remains gradual. A similar development of flash in the cut stock is shown in Figure 4. Tests with hole-piercing dies

Card2/3

SOV/122-58-8-12/29

Tests with Blanking Press Tools, reinforced with Carbide Edges

show a tool life of up to 15 million strokes below a flash width of 0.03 mm when piercing 0.5 mm thick transformer steel. 0.8 million strokes were reached with 3 mm thick 0.20% C steel. By the nature of their wear, the medium-grain carbides have proved best. It is claimed that a great economy and an improved quality of cutting are achieved compared with tool-steel dies and punches. There are 4 figures and 1 table.

Card 3/3 1. Tools--Test methods 2. Tools--Test results 3. Dies--Test methods
4. Dies--Materials

GALBY, Mikhail Trofimovich, kand.tekhn.nauk; CHETVERIKOV, S.S., prof.,
retsensent; BELOSTOTSKIY, L.Ya., inzh., red.; BALANDIN, A.P.,
red.izd-va; SOKOLOVA, T.P., tekhn.red.; SOROKINA, G.Ye.,
tekhn.red.

[Counterbores] Zenkery. Moskva, Gos.nauchno-tekhn.izd-vo
mashinostroit.lit-ry, 1960. 86 p. (MIRA 13:12)
(Metal-cutting tools)

CHETVERIKOV, S. S.

PHASE 1 BOOK EXPLOITATION	SOV/5289
Akademiya nauk SSSR. Tsentral'naya nauchno-issledovatel'skaya laboratoriya elektricheskoy obrabotki materialov. Elektroiskrovnyaya obrabotka metallov (Electric-Spark Machining of Metals) no. 2. Moscow, Izd-vo AN SSSR, 1966. 262 p. Errata slip inserted. (Series: Its: Trudy) 6,000 copies printed. Sponsoring Agency: Akademiya nauk SSSR. Resp. Ed.: B. R. Lazarenko; Ed. of Publishing House: S. M. Moyzhes; Tech. Ed.: A. P. Guseva. PURPOSE: This collection of articles is intended for process engineers, and technical and research personnel engaged in the working of metals. COVERAGE: Problems concerning the most effective application of electric-spark methods in industry are reviewed. Possible future developments in the field of electric-spark machining and its automation are discussed, and, for instance of its present utilization in industry, the technical and economic effectiveness of the process is examined, and the equipment involved is described. The relationship between the characteristics of electric-spark pulses and the production characteristics (productivity, machining accuracy, and surface quality) of electric-spark machining is established. An electric-spark method is advanced for the curvilinear cutting of materials with a 20 to 30 micron-thick wire, thus directly producing a finished part. Non-Soviet developments in the field of electric-spark machining are also treated. Nationalities are mentioned. There are 121 references: 82 Soviet, 20 English, 10 French, 8 German, and 1 Italian. These references accompany individual articles. Zolotykh, B. N., and I. P. Korobova. Selecting Optimum Regimes for Electric-Spark Machining of Sintered-Carbide Alloys 114 Chetverikov, S. S., and N. K. Poteyev. Electric-Spark Machining of the Cutting Elements of High-Carbon-Alloy Blanking Punch-Die Sets 120 Gulyar'yan, K. K. The Electric-Spark Method Applied to Threading 142 Kholodnov, Ye. V. Manufacture of Precision Tools by the Electric-Spark Method 156 Gulyar'yan, K. K., and V. L. Kravchenko. Manufacture of Complex-Shaped Machine Parts by Using a Program-Controlled Electric-Spark Machining Unit 179 Aleksandrov, V. P., and B. N. Zolotykh. Selecting the Optimum Procedures for Electric-Spark Machining of Nickel-Base Heat-Resistant Alloys 196 Gorbunov, B. M. Electric-Spark Lapping Used on Flour-Mill Halls 205 Pron'ko, O. F. Manufacture of Stainless and High-Manganese Steel Parts by the Electric-Spark Method 217 Ayzenshtok, V. L., and S. I. Komanar. Electric-Spark Machining of Mass-Produced Parts 227 Levinson, Ye. M. The Development of Electric-Spark Machining in Mass Production 233 Card 4/5	

GEL'FAND, A.Ye., inzh.; NOWGORODOV, A.S., inzh.; FOTEYEV, N.K.,
kand. tekhn. nauk; CHETVERIKOV, S.S., doktor tekhn. nauk,
prof., retsenzent; IVANOVA, N.A., red. izd-va; SMIRNOVA,
G.V., tekhn. red.

[Machining of hard alloys] Obrabotka tverdykh splavov. Mo-
skva, Mashgiz, 1963. 243 p. (MIRA 16:5)
(Ceramic metals) (Metal cutting)

L 39705-65 EPP(n)-2/EPR/EWP(k)/ZWT(d)/EWP(h)/EWP(i)/EWP(j)/EWP(k)/EWP(l)
EWP(e)/EWP(f)/EWP(g) Ps-1/Ps-2/Ps-3
A. E. ... 111127

AUTHOR: Chetverikov, S. S.; Shumov, Ye. G.

TITLE: Electrical-discharge machining of carbide chasers

SOURCE: Stanki i instrument, no. 4, 1965, 25-27

TOPIC TAGS: carbide chaser, threading, threading tool, thread chasing, electrical discharge machining, carbide tool

ABSTRACT: Fabrication of sintered-carbide²¹ die-head chasers by electrical-discharge machining (EDM) is discussed. A circular electrode (tool) with a profile and pitch corresponding to the thread reproduces its form on a tangential chaser. A high-frequency generator GIT-1 developed at IANIL-1, Leningrad, provides high metal-removal rates, a seventh-class of surface finish [0.8—1.6 μ (rms)], and an absence of surface cracks. Tap water is used as dielectric fluid. The machining conditions are: capacitance, 3300 puf for roughing and 1530 puf for finishing; pulse duration, 4 μsec; pulse frequency, 20 kHz.

Card 1/2

L 39705-65

ACCESSION NR: AP5010397

voltage, 120 v. As a rule, the entire profile is formed in
cut; only with a considerable length (for a number of blanks)
when high precision is needed is a second finishing cut (depth
cut, 0.1—0.3mm) required. A large batch of experimentally machined
chamfers from sintered carbides of various types showed good
performance characteristics. Orig. art. has: 5 figures.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: 11

NO REF SOV: 000

OTHER: 000

ATT: REF: 000

Card 2/2

CHETVERIKOV, S.S.

Some moments of the evolutionary process from the point of view of
modern genetics. Biul. MOIP. Otd. biol. 70 no.4:33-74 J1-Ag '65.
(MIRA 18:9)

USSR/Soil Science. Soil Genesis and Geography

J-2

Abs Jour : Ref Zhur - Biol., No 20, 1958, No 91362

Author : ~~Chetverikov~~ V.N.

Inst : Grodno Agricultural Institute

Title : Soil-climate Characteristics of the Grodnenskaya Oblast

Orig Pub : Tr. Grodnensk. s.-kh. in-ta, 1957, vyp. 3,3-14

Abstract : The following soil regions were divided within the boundaries of Grodnenskaya Oblast: the Nemansko-Narevskiy where turf-podzolic sandy soils predominate in the soil cover, the Shychinsko-Lidskiy with turf-podzolic, sandy loam and sandy soils in glacial boulder deposits and Grodnensko-Velkhovyssko-Novogrudskiy with turf-humus-carbonate and turf-podzolic soils. A brief agrochemical characteristic of the soils and a diagram of the soil districts are given. -- F.I. Shcherbak

Card : 1/1

CHETVERIKOVA, V.N., dotsent (Dnepropetrovsk, Serikovskiy per., d.2-b,kv.1)

Dynamics of industrial traumatism at the Karl Liebknecht Metallurgical Plant in Dnepropetrovsk and measures for its reduction. Ortop., travm. i protez. 24 no.3:47-50 Mr '63.

(MIRA 17:2)

1. Iz Dnepropetrovskogo meditsinskogo instituta (rektor - prof. N.Ya. Khoroshmanenko) i Ukrainskogo instituta ortopedii i travmatologii imeni M.I. Sitenko (dir. - chlen-korrespondent AMN SSSR prof. N.P. Novachenko).

CHE TVERI KOV, V. N.

28(2)

2.3

PHASE I BOOK EXPLOITATION

SOV/3254

Moscow. Vyssheye tekhnicheskoye uchilishche imeni Baumana.

Schetno-reshayushchiye pribory (Computers) Moscow, Mashgiz, 1959.
84 p. (Series: Its: Sbornik trudov, vyp. 82) 6,000 copies
printed.

Ed.: S. O. Dobrogurskiy, Doctor of Technical Sciences, Professor;
Ed. of Publishing House: A. L. Tairova; Tech. Ed.: A. F. Uvarova;
Managing Ed. for Literature on Machine Building and Instrument
Making (Mashgiz): N. V. Pokrovskiy, Engineer

PURPOSE: This collection of articles is intended for engineers,
scientific personnel and students working in the field of com-
puters.

COVERAGE: This is a collection of articles compiled by the depart-
ment of computers at MVTU and devoted to analysis of computer
components: diode circuits which perform mathematical operations;
drive circuits with a servomotor in the form of a powder magnetic

Card 1/6

SOV/3254

Computers (Cont.)

clutch, with a mushroom-shape friction clutch and with a friction clutch of the Svetozarov system; investigation of a pulse tracking system and of the drifts occurring in a single-shaft gyrostabilizer. No personalities are mentioned. There are no references.

TABLE OF CONTENTS:

Kazakov, V. A. Candidate of Technical Sciences. Function Generators
Using Diodes 3

The author states that vacuum-tube or semiconductor diodes may be used in function generator circuits, for which case errors may be as high as 1 to 3 percent, or as low as one-tenth of a percent. When selenium or copper oxide rectifiers are used as diodes, errors will greatly increase. The author emphasizes the advantages of diode-equipped function generators over electromechanical ones (potentiometers, rotatable transformers, etc.). These advantages consist primarily in the absence of mechanical parts

Card 2/6

Computers (Cont.)

SOV/3254

and, consequently, in low inertia. The author presents several schematic diagrams of various types of function generators and derives their equations according to functions of these generators (reproduction of a parabola, sine and cosine functions, multiplication of two independent variables, etc.). The author concludes that errors occurring in the operation of diode function generators are mostly errors of method and instrument errors.

Chetverikov, V. N. Candidate of Technical Sciences. Tracking
Drives With Powder Magnetic Clutches 22

The author investigates the possibilities of developing drives with position control or with the rate of change of position or with both methods combined. A powder magnetic clutch was used as the actuating element. As setting elements, a potentiometer and a tachogenerator were used. From these a voltage proportional to the angle and speed of rotation of the flywheel is delivered as the input signal, from which a corresponding clutch velocity is

Card 3/6

Computers (Cont.)

SOV/3254

utilizing the superposition principle, the author finds optimum values of system parameters by comparing results obtained from the investigation of the three most characteristic features of the operation of tracking systems under pulse conditions. These features are: 1) effect of the initial error of the indicator device on the stability and quality of the tracking system. 2) distortion of the coordinate incoming on the system input by tracking errors and the determination of the accuracy of continuous adjustment of this coordinate. 3) effect of acceleration in the rate of change of the input coordinate on the value of the systematic error of adjustment. The results of investigation of these three cases permit making recommendations as to the selection of optimum values of the basic system parameters and particularly, of the optimum value of the time constant of the drive. This, in turn, permits calculating the function generator of the system according to the pulse sequence periods, which change within wide limits.

Card 5/6

Computers (Cont.)

SOV/3254

Nikitin, Ye. A. Candidate of Technical Sciences. Drifts of a Single-Shaft Stabilizer During the Swinging of Its Framework

77

The author assumes that the swingings are harmonic and have a small amplitude and that harmful Coulomb friction and damping moments act along the stabilization axis, Y. The author derives equations for the system and derives a formula for the averaged drift velocity.

AVAILABLE: Library of Congress

Card 6/6

JP/mmh
4-11-60

CHETVERIKOV, V.N.

Moscow. Vysshaya tekhnicheskoye uchilishche imeni Bauman. Kafedra
avtomaticheskikh mashin
Vyshteticheskaya tekhnika (Computer Techniques) Moscow, Mashgiz, 1959.
153 p. (Series: Vysshaya tekhnicheskoye uchilishche.
Zhurnal, No. 2) 2,500 copies printed.

Ed.: B.V. Anisimov, Candidate of Technical Sciences; Tech. Ed.:
B.I. Model' and A.P. Uvarov; Managing Ed. for Literature
Machine Building and Instrument Construction: M.V. Fokrovskiy,
Engineer.

FOREWORD: This book may be useful to applicants and other students
specializing in computer technology, and also to designers and
engineers and technical personnel who make use of electronic
computers.

Editor (Imeni Bauman) in honor of the 40th anniversary of the
October Revolution. The articles contain the results of theoretical
and experimental studies on the performance of various com-
ponents of electronic computers. Among the topics discussed are:
program storage, control devices, the connection between the per-
formers of an algorithm and a machine, etc. The application of
these components to the control of technological processes is
also discussed. Author: B.V. Anisimov, M.V. Fokrovskiy and V.N. Golubkin.
Candidate of Technical Sciences. Analysis of the Quality of Servo-
Systems With Discrete Element

Bobrov, Ye.V., Engineer. The Effect of Block Diagram Parameters on
the Performance Quality of a Tubeless Direct Current Operational
Amplifier 46

Anisimov, B.V., Candidate of Technical Sciences, V.N. Golubkin,
Candidate of Technical Sciences and Yu.M. Dovzhenko, Engineer. 56
Device for Transforming the Results of Recording of a Program
Trajectory, M.V. Fokrovskiy, Candidate of Technical Sciences, and
Engineer, Certain Principles of Constructing Local Control by
External Memory Devices 21

Vlasenko, V.I., Candidate of Technical Sciences, G.B. Zhdanov,
Candidate of Technical Sciences, and A.M. Anisimov, Engineer. 64
Method of Forming the Images of Numbers by Means of a Ferrite
Matrix

Shurder, Yu.A., Candidate of Physical and Mathematical Sciences.
The Connection Between the Parameters of an Algorithm and of a
Machine 70

Anisimov, B.V., Candidate of Technical Sciences, V.N. Golubkin,
Candidate of Technical Sciences, and A.Ya. Savel'yev, Engineer. 75
Device for the Control of Recording of Information on Magnetic Tape
an Economical Selection of the Dimensions of a Magnetic Drum 81

Vasil'yev, G.P., Engineer. Analysis of Certain Relationships for
Anisimov, B.V., Candidate of Technical Sciences, and Yu.V.
Vinogradov, Engineer. On the Problem of the Exactness of the Re-
presentation of Continuously Varying Values in a Numerical Code 86

Shreyder, Yu.A., Candidate of Physical and Mathematical Sciences.
Solution of Boundary Value Problems by the Method of Polynomial
Approximations 95

Markov, G.Ye., Engineer. Certain Considerations on the Preventive
Control of Electronic Computers 99

M.S. Saplin, Engineer. Photoelectric Device Which Receives
PRINTED NUMERICAL Signs 108

Palashevskiy, A.M., Engineer. Analysis of Information Storage
COMPONENTS OF COMPUTERS 121

Chetverikov, V.N., Candidate of Technical Sciences. Relay
Integrating Drive With Electromagnetic Powder Clutch 130

Kalashnikov, V.A., Engineer. Certain Algorithms for the Rational
Planning of Production 149

Kurnetsov, M.M., Candidate of Technical Sciences. Circuit
Mechanisms for Programmed Control 148

CHETVERIKOV, V.N., kand. tekhn. nauk

Selsyn drives with electromagnetic powder clutches, [Trudy] MVTU
no.82:22-28 '59. (MIRA 13:3)
(Servomechanisms)

CHE TVERIKOV, V. V.

PHASE I BOOK EXPLOITATION SOV/223

Moscow. Vysheye tekhnicheskoye uchilishche

Raznoye detalay i mekhanizmov tochnykh priborov; sbornik statey (Design of Parts and Mechanisms of Precision Instruments; Collection of Articles) Moscow, Mashstz, 1960. 260 p. 3,000 copies printed.

Ed. (Title page): T. A. Devondyan, Doctor of Technical Sciences, Professor; Ed. (Inside book): Ya. D. Givartov, Engineer, Tech. Ed.: A. V. Dvorkov, Managing Ed. for Literature on Machine Building and Instrument Making (Mashstz): N. V. Pokrovsky, Engineer.

PURPOSE: This collection of articles is intended for scientific workers and engineers engaged in instrument making.

CONTENT: The results of investigations on making instruments with complex and design-oriented problems are presented. It is claimed, are published here for the first time. The articles cover theory and methods of aperiodical governor engagement, a new method of manufacturing toothed wheels with alternating ratio within one revolution, a universal method for designing an oscillating system (allowing for the effect of centrifugal governors used in instrument design. Some of the articles are accompanied by Soviet and non-Soviet references. No personalilities are mentioned.

Author: I. P. Candidate of Technical Sciences, Docent. Design of a Free Oscillating System "Balance Arm - Strip Spring" Allowing for the Constant Angular Velocity of the Motion of the Spring. The exact as well as an approximate analytical method for the above design are presented. 50

Author: A. M. Candidate of Technical Sciences, Docent. Theory and Practical Methods of Balancing the "Balance Wheel - Spiral Spring" Oscillating System in Timepieces. A development of the problems concerning the effect of the unbalance of the oscillating system on the running of a clockwork is presented. 82

Author: N. M. Engineer. Design of Centrifugal Governors. The problem of methodological aspects of the perfected design calculation of the brake centrifugal governors in instrument making is discussed. The action of the governor mechanism is investigated (including the governor and lever) by taking into account inertial and frictional loads in the whole mechanism. Sample calculations using simplified design formulas are presented. 106

Author: A. S. Candidate of Technical Sciences, Docent. "Spring Hinges" Mechanisms in Measuring Instruments. The design of spring hinges in small angular movements. Various designs of spring suspensions are given and the problems of compensating the drop in the force during measuring in instruments with spring mechanisms are discussed. 171

Author: V. N. Candidate of Technical Sciences. The Re-Verne Pyrotechnic Powder Clutch. The theory and design of the above clutch are presented. Card 1/6 198

ANISIMOV, B.V.; CHETVERIKOV, V.N.; KORBINSKIY, N.Ye., doktor tekhn. nauk, prof., retsenzent; TAKHVANOV, G.I., kand. tekhn. nauk, retsenzent; DOBROGURSKIY, S.O., doktor tekhn. nauk, red.; YELISEYEV, M.S., red. izd-va; EL'KIND, V.D., tekhn. red.

[Fundamentals of the theory and design of digital computers]
Osnovy teorii i proektirovaniia tsifrovyykh vychislitel'nykh mashin. Moskva, Mashgiz, 1962. 431 p. (MIRA 15:10)
(Electronoc digital computers)

CHETVERIKOV, V.N.

PHASE I BOOK EXPLOITATION

SOV/6235

Anisimov, B. V. and V. N. Chetverikov

Osnovy teorii i proyektirovaniya tsifrovyykh vychislitel'nykh mashin
(Fundamentals of the Theory and Design of Digital Computers).
Moscow, Mashgiz, 1962. 431 p. 22,000 copies printed.

Reviewers: N. Ye. Kobrinskiy, Professor and Doctor of Technical
Sciences, and G. I. Takhvanov, Candidate of Technical Sciences;
Ed.: S. O. Dobrogurskiy, Doctor of Technical Sciences; Ed. of
Publishing House: M. S. Yeliseyev; Tech. Ed.: V. D. El'kind;
Managing Ed. for Literature on Means of Automation and Instrument
Making: N. V. Pokrovskiy, Engineer.

PURPOSE: This textbook is recommended for use in schools of higher
technical education by the Ministry of Higher and Specialized Secondary
Education of the RSFSR. It has been compiled in accordance with
the program approved by the Ministry for studies on "Mathematical
and Computing Instruments and Devices" in the course on "Digital
Computers."

Card 1/11 1/2

CHETVERIKOV, V. N.

PHASE I BOOK EXPLOITATION

SOV/6235

Anisimov, B. V. and V. N. Chetverikov

Osnovy teorii i proyektirovaniya tsifrovyykh vychislitel'nykh mashin
(Fundamentals of the Theory and Design of Digital Computers).
Moscow, Mashgiz, 1962. 431 p. 22,000 copies printed.

Reviewers: N. Ye. Kobrinskiy, Professor and Doctor of Technical
Sciences, and G. I. Takhvanov, Candidate of Technical Sciences;
Ed.: S. O. Dobrogurskiy, Doctor of Technical Sciences; Ed. of
Publishing House: M. S. Yeliseyev; Tech. Ed.: V. D. El'kind;
Managing Ed. for Literature on Means of Automation and Instrument
Making: N. V. Pokrovskiy, Engineer.

PURPOSE: This textbook is recommended for use in schools of higher
technical education by the Ministry of Higher and Specialized Secondary
Education of the RSFSR. It has been compiled in accordance with
the program approved by the Ministry for studies on "Mathematical
and Computing Instruments and Devices" in the course on "Digital
Computers."

Card 1/2
2

Fundamentals of the Theory (Cont.)

COVERAGE: The basic principles of the theory and designing of digital computers are explained. Methods of calculating logical circuits and the main computer systems utilizing various physical elements, as well as the basic principles of their construction, are discussed. There are 15 references, all Soviet.

TABLE OF CONTENTS:

Foreword	3
Introduction	5
Ch. I. Electromechanical Digital Computers	
1. Small digital machines	11
Input and carry mechanisms	11
Calculation mechanisms (calculators)	14
Drive mechanisms	18
Digit transmission mechanisms	27
Card 2/22	29

SHADRIN, Vitaliy Nikolayevich; CHETVERIKOV, V.N., red.

[Phase control using magnetic tape] Fazovoe upravlenie ot
magnitnoi lenty. Moskva, Izd-vo "Energia," 1964. 86 p.
(Biblioteka po avtomatike, no.96) (MIRA 17:4)

1 08508-67 ENT(d)/FWP(c)/FWP(v)/FWP(k)/FWP(h)/FWP(l) IJP(c) BB/CG
ACC NR: AM6004714 Monograph

UR/

55
51
B+1

Anisimov, B. V.; Chetverikov, V. N.

Principles of the theory and designing of digital computers (Osnovy teorii i proyektirovaniya tsifrovyykh vychislitel'nykh mashin) 2d ed., rev. and enl. Moscow, Izd-vo "Mashinostroyeniye", 1965. 483 p. illus., biblio. Textbook for institutions of higher technical education. 14,000 copies printed.

TOPIC TAGS: electronic computer, data processing equipment, computer input unit, computer output unit, arithmetic unit, computer control systems, punched card, punched paper tape, reading machine, computer logic, computer storage device, logic unit

PURPOSE AND COVERAGE: This manual intended for students in schools of higher education, has been compiled for use in a course entitled "Mathematical and Computing Instruments and Devices." It can also be used by technical personnel concerned with the design of digital computers. The manual discusses the theory and design of digital computers, methods for calculating basic logic circuits and digital computers based on various physical principles. The manual is based on lectures delivered by the authors during a period of several years

Card 1/8

UDC 681.142.32.001.1.001.12 (075.8)

L 08508-67

ACC NR: AM6004714

Nonpositional systems -- 70

Positional systems -- 71

Binary-coded systems -- 75

3. Fundamentals of logic algebra -- 77

4. Forms of numerical representation in a computer -- 88

Ch.III. Basic Logic Components and Units of Computers -- 91

1. Inverters -- 93

Statistical inverters using vacuum triodes -- 94

Statistical inverters using transistors -- 98

Calculation of potential-inverter fixed states -- 101

Inverters using ferrites -- 107

Calculation of optimal inverter-operation conditions -- 113

2. Collecting circuits -- 119

Collecting circuits using semiconductor diodes -- 120

Collecting circuits using electron tubes -- 128

Collecting circuits using ferrite cores -- 129

3. Coincidence circuits -- 130

Coincidence circuits using semiconductor diodes -- 131

Coincidence circuits using electron tubes -- 134

Coincidence circuits using transistors -- 136

Diode-transformer coincidence circuits -- 138

Coincidence circuits using ferrite cores -- 141

Card 3/8

L 08508-67

ACC NR: AM6004714

Coincidence circuits using ferrite-transistor cells -- 142
Circuits using transfluxors -- 143
Circuits using parametrons -- 146
Inhibitor circuit -- 150
Principle of inversion of collecting and coincidence circuits -151

4. Trigger circuits -- 152
 - Static triggers using electron tubes -- 153
 - Static triggers using transistors -- 158
 - Dynamic triggers using triodes -- 165
 - Dynamic triggers using pentodes -- 166
5. Shaper amplifiers -- 167
 - Shaper using transformer feedback -- 168
6. Registers, counters, decoders -- 178
 - Registers -- 178
 - Counters -- 181
 - Decoders -- 188

Ch.IV. Storage Devices -- 198

1. Basic concepts and classifications -- 198
2. Storage devices using delay lines -- 201
 - Ultrasonic lines -- 201
 - Magnetostrictive lines -- 207
 - Electromagnetic lines -- 208

Card 4/8

L 08508-67

ACC NR: AM6004714

0

3. Magnetic-recording storage devices -- 214
 - Principles of recording and reading -- 215
 - Magnetic drum -- 220
 - Calculation of drum deformation -- 226
 - Magnetic tape -- 232
 - Magnetic cards -- 235
4. Storage devices using magnetic cores -- 238
 - Storage devices using ferrites -- 238
 - Storage devices using transfluxors -- 249
5. Storage devices using cathode-ray tubes -- 253
6. Perforated cards and tapes -- 264
7. Storage devices based on other elements -- 267
 - Storage devices using diodes -- 267
 - Storage devices using relays -- 270
 - Static-paper storage devices -- 271
 - Ferroelectric storage devices -- 274
 - Storage devices using cryotrons -- 276

Ch.V. Arithmetic Devices -- 280

1. Accomplishment of elementary operations -- 280
 - Direct code -- 282
 - Auxiliary code -- 283

Card 5/8

1 08508-67
ACC NR AM6004714

Reverse code -- 285
Indications of discharge-grid overflow -- 287
Modified auxiliary code -- 288
Modified reverse code -- 289
Addition of numbers with floating point -- 290
Accuracy of computations and the round-off -- 292
2. Structure of arithmetic devices -- 294
One -column adder -- 294
Serial and parallel adders -- 295
Coincidence adders -- 297
Accumulator -- 305
Multipliers -- 312
Accomplishment of division -- 319
Example of arithmetic device -- 322

Ch.VI. External Devices -- 329

1. Conversion of numbers from one number system into another -- 329
Methods of decimal-to-binary conversion -- 329
Octal-to-binary conversion -- 331
Methods of binary-to-decimal conversion -- 332
Binary-to-octal conversion -- 337
2. Information input devices -- 337
Preparation of initial data -- 339
Automatic readers -- 344

Card 6/8

I. 08508-67

ACC NR: AM6004714

3. Information-output devices -- 348
 - Functional circuits -- 349
 - Printers -- 352
4. Analog-to-digital data conversion -- 357
 - Quantization and coding -- 357
 - Angle-to-digital converters -- 361
 - Methods of eliminating reading errors -- 365
 - Coding with intermediate conversion in a time interval -- 373
 - Voltage conversion -- 382
5. Digital-to-analog conversion -- 392
 - Number-to-voltage conversion -- 392
 - Number-to-angle of rotation conversion -- 399

Ch.VII. ¹⁴Control Devices -- 404

1. Command systems and the order in which they are obeyed -- 404
2. Control devices -- 406
 - Central control unit -- 408
 - Command control unit -- 410
 - Operation control unit -- 412
 - Control desk -- 415
3. Computer-operation control -- 416
 - General principles of fault detection -- 416

Card 7/8

I 08508-67

ACC NR: AM6004714

Methods of processing a primary recording medium -- 424

Preventive control -- 424

Systems of automatic fault scan -- 429

Ch.VIII. Fundamentals of Electronic Computer Designing -- 433

1. Selection of computer design -- 433

2. Cooling of computer -- 440

3. Power supply -- 446

4. Reliability of electronic computers -- 450

5. Basic characteristics of some Soviet electronic computers -- 459

Bibliography -- 480

SUB CODE: 09/ SUBM DATE: 12Jan65/ ORIG REF: 017/ OTH REF: 001

Cord 8/8 afs

CHETVERIKOV, V. S.

PA 59/49T32

USSR/Medicine - Hygiene and Feb 49

Sanitation
Medicine - Disposal and Purification of
Sewage

"Sanitary Control of the Waste Waters of
Hospitals for Infectious Diseases," V. S.
Chetverikov, Oblast Sanitation Epidemiol Sta,
Yaroslavl, 1 p

"Gig 1 San" No 2

Periodic checks of Yaroslavl sewage water re-
vealed presence of typhoid bacillus. Municipal
Sanitation Adm immediately recommended that
hospitals using municipal sewage and water
59/49T32

USSR/Medicine - Hygiene and (cont'd) Feb 49
Sanitation

supply circuits make every effort to sterilize water
disposal from hospitals for infectious diseases.
Describes duties of various health and sanitation
organizations in maintaining municipal health.

59/49T32

CHETVERIKOV, V.S., prof. (Yaroslavl')

Concerning Professor A. I. Pakhomychyev's article "The Teaching of
hygiene in the medical departments of medical institutes". Gig. i san.
23 no.11:68 N '58 (MIRA 12:8)

(HYGIENE--STUDY AND TEACHING)

KULIKOV, V.O., inzh.; KHIL'KO, M.M., inzh.; PRILEPSKIY, V.M., inzh.;
ZUBKOV, A.P., inzh.; prinimali uchastiye; MEKSHCHII, N.P.,
inzh.; CHETVERIKOV, V.Ya., inzh.; DUBROV, V.S., inzh.; VOLKOV,
T.F., tekhnik; YERCHOV, V.I.; tekhnik; SAFONOVA, M.F., tekhnik

Using scale in steelmaking by the scrap and ore process.
Stal' 20 no.8:708-710 Ag '60. (MIRA 13:7)
(Open-hearth process)

MAL'KOV, V.G., inzh.; PRILEPSKIY, V.I., inzh.; DUBROV, V.S., inzh. V rabote
prinimali uchastiye; KHIL'KO, M.M., inzh.; MERSHCHIY, N.P., inzh.;
CHETVERIKOV, V.Ya., inzh.; KUROV, I.N., inzh.; RATNER, B.R., inzh.;
BUEYCHEV, G.D., inzh.; ALFEROV, K.S., inzh.; PAVLENKO, N.M., inzh.;
FINKEL'SHTEYN, M.M., inzh.; PLUZHKO, N.F., inzh.; SAMSONOV, T.F.,
inzh.; BABENKO, N.N., inzh.; LAD'YANOV, N.I., inzh.; TUPIL'KO, V.S.,
inzh.

Deoxidizing and alloying 25G2C steel with ferromanganese and ferro-
silicon in 200-ton ladles. Stal' 20 no.9:803-806 S '60.(MIRA 13:9)
(Steel, Structural--Metallurgy)

0